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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/911,673	07/24/2001	Taro Endo	01430/LH	3874

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EXAMINER

NGUYEN, KEVIN M

ART UNIT PAPER NUMBER

2629

DATE MAILED: 04/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/911,673	<b>Applicant(s)</b> ENDO ET AL.	
	<b>Examiner</b> Kevin M. Nguyen	<b>Art Unit</b> 2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 10 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6,7,9,11,13-21 and 26-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6,7,9,11,13-21 and 26-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Request for Continued Examination***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 02/10/2006 has been entered. An action on the RCE follows:
2. The status of claims 1-5, 8, 10, 12, 22-25 are cancelled, claim 6 is amended, claims 7, 9, 11, 13-21 and 26 are previously presented, and claims 27 and 28 are new. Thus, claims 6, 7, 9, 11, 13-21 and 26-28 are currently pending in the application.
3. Applicant's arguments, see pages 10-16, filed 02/10/2006, with respect to the rejection(s) of claim(s) 6, 7, 9, 11, 13-21 and 26 under the statutory basis for the previous rejection have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of newly found prior art references.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelet et al (US 6,845,277) hereinafter Michelet in view of Fukuda (US 6,295,002).

5. As to claim 6, Michelet teaches a display system [see Fig. 1] comprising:

a host apparatus [10, 22] having an image input interface [20];

a display apparatus [21] which is operated by supply of at least one of a video signal [a graphics channel] and power [at least one of a power supply 34 via bus 18 and bus 19] from said host apparatus [see col. 4, lines 16-18];

a communication interface [buses 18 and 20] for communicating data between said host apparatus and said display apparatus [see col. 2, lines 40-46];

a storing section for storing on-screen display information [a display 21 provides on screen display function ...for displaying text and graphics on the video screen, col. 5, lines 47-55];

an information superimposing section [OSD decoder 54, Fig. 5] for superimposing said received on-screen display information of the video signal, wherein the host-side communication section [10, 22] transmits the video control [62, 63] having the on-screen display information superimposed thereon, the display-side communication section [52] receives the transmitted signal, and the display apparatus [60] displays and image of the on-screen display information [see col. 9, lines 10-18].

Accordingly, Michelet teaches all of the claimed limitation, except wherein said display apparatus comprises a storing section for storing power consumption data, a display-side communication-section for transmitting said stored power consumption data and said on-screen display information; wherein said host apparatus comprises:

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a host-side communication section for receiving said power consumption data transmitted from said display apparatus and said on-screen display information;  
a power control section for entirely performing power control of said display system based on said power consumption data received from said host-side communication section.

However, Fukuda teaches wherein said display apparatus [51] comprises

a storing section for storing power consumption data [RAM 62c],  
a display-side communication-section [61] for transmitting said stored power consumption data and said on-screen display information;  
wherein said host apparatus [3] comprises:

a host-side communication section [44] for receiving said power consumption data transmitted from said display apparatus and said on-screen display information;

a power control section [controller section 1] for entirely performing power control of said display system based on said power consumption data received from said host-side communication section [see col. 6, lines 6-14].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement the battery-powered data (corresponding to the power consumption data) has been established bidirectional communication between the display section (5) and control section (1) as taught by Fukuda for the intended use of the display system of Michelet, because this would reduce the consumption electric

power of the electronic devices, while allowing the communication system to operate for an extended period of time (see Fukuda, col. 13, lines 8-17).

6. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Michelet in view of Fukuda as applied to claim 6 above, and further in view of Kosugi et al (US 6,050,818) hereinafter Kosugi.

7. As to claim 14, the combination of Michelet and Fukuda teaches all of the claimed limitation, except for said information superimposing section converts the on-screen display information stored in at least one of said first memory and said second memory into indicatable bit map information, and superimposes the indicatable bit map information on the video signal.

However, Kosugi teaches said information superimposing section [37, Fig. 6A, col. 7, lines 57-62] converts the on-screen display information stored in at least one of said first memory [a memory unit, col. 10, lines 56-57] and said second memory [col. 14, lines 18-24] into indicatable bit map information [33r, Fig. 23], and superimposes the indicatable bit map information on the video signal "the warning is superimposed on an image being displayed" [see col. 13, lines 49-53, and col. 13, line 65 through col. 14, lines 24].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement a goggle of the bit map display application, e.g., "the warning is superimposed on an image being displayed" as taught by Kosugi for the intended use of the display of the combination of Michelet and Fukuda, because the warning display would prevent any harm to the viewer's vision, a warning text is

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displayed in a white color, a warning message reminding viewers not to use the optical visualizing apparatus (1) for a prolonged time, and a warning message any negative effects on the viewer (see Kosugi, col. 8, lines 52-65).

8. Claims 18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelet in view of Fukuda, and further in view of Rallison et al (previously cited, US 5,991,085) hereinafter Rallison.

9. As to claims 18 and 20, the combination of Michelet and Fukuda teaches all of the claimed limitation of claim 6, except wherein said display apparatus is adapted to be selectively connected to a plurality of types of host apparatuses, and wherein said display apparatus is adapted to be selectively connected to a plurality of types of host apparatus.

However, Rallison teaches interfacing among a plurality of types of host apparatus comprising host apparatuses (510, 503), a VCR, a videodisk player, a receiver, and a personal computer (see figure 25A) with a plurality of types of display apparatus comprising a HUD 102, a monitor, and a television 515a (see figure 22).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement interfacing among the plurality of types of display apparatuses with the plurality of types of host apparatuses as taught by Rallison for the intended use of the combination of Michelet and Fukuda, because a number of variations and modifications of the invention can be also be used (see Rallison, col. 30, lines 38-40), e.g., the head mounted display can be combined with or coupled to other devices (see Rallison, col. 30, lines 55-57).

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10. Claim 7, 9 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable by Michelet.

11. As to claim 7, Michelet teaches a display system [Fig. 5] comprising:

a host apparatus [50] having an image output interface [51];

a display apparatus [60] which is operated by receiving at least a video signal [62] from said host apparatus [50];

a communication interface [63] for communicating data between said host apparatus [50] and said display apparatus [60, col. 2, lines 40-46];

wherein said display apparatus [60] comprises a memory for storing on-screen display information [OSD in element 54], and a display-side communication section [54] for transmitting the on-screen display information.

Michelet further teaches said host apparatus [50] comprises a host-side communication section [63] for receiving the on-screen display information transmitted by said display apparatus [a hardware monitoring circuit, not shown in Fig. 5, col. 9, lines 13-14 which receives a direct access to the OSD functions of a display or a screen and which, therefore, can provide enhance feedback information about hardware condition, see Fig. 5, col. 9, lines 20-24], and an information superimposing section for superimposing the received on-screen display information on the video signal [the superimposition of the OSD text and graphics on the video screen, col. 9, lines 10-18].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the embodiment of Fig. 1 and embodiment of Fig. 5 for



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any electronic circuitry providing other functions than hardware monitoring can take benefit from the teaching of the present invention [see col. 9, lines 23-26].

12. As to claim 9, Michelet teaches wherein said communication interface has a specification for communication between said host-side communication section and said display-side communication section which conforms with a DDC1/DD2B/DD2AB standard prescribed by Video Electronics Standards Association [see col. 6, lines 4-19].

13. As to claim 11, Michelet teaches wherein said display apparatus includes a mode for operating only said communication interface for communication with said host apparatus [see col. 2, lines 39-46].

14. Claims 15, 27 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelet in view of Kosugi.

As to claim 15, Michelet teaches all of the claimed limitation of claim 7, except for said information superimposing section converts the on-screen display information stored in at least one of said first memory and said second memory into indicatable bit map information, and superimposes the indicatable bit map information on the video signal.

However, Kosugi teaches said information superimposing section [37, Fig. 6A, col. 7, lines 57-62] converts the on-screen display information stored in at least one of said first memory [a memory unit, col. 10, lines 56-57] and said second memory [col. 14, lines 18-24] into indicatable bit map information [33r, Fig. 23], and superimposes the indicatable bit map information on the video signal "the warning is superimposed on an

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image being displayed [see col. 13, lines 49-53, and col. 13, line 65 through col. 14, lines 24].

As to claims 27 and 28, Kosugi teaches wherein the display apparatus comprises a microdisplay apparatus that is wearable by a user, and wherein the display apparatus comprises a microdisplay apparatus that is wearable on at least one of a head and face of a user [see Fig. 1, col. 4, lines 30-36].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement a goggle including a bit map display application, e.g., “the warning is superimposed on an image being displayed” as taught by Kosugi for the intended use of the display of the display system of Michelet, because the warning display would prevent any harm to the viewer’s vision, a warning text is displayed in a white color, a warning message reminding viewers not to use the optical visualizing apparatus (1) for a prolonged time, and a warning message any negative effects on the viewer (see Kosugi, col. 8, lines 52-65).

15. Claims 13, 19 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michelet in view of Rallison.

As to claims 18 and 20, Michelet teaches all of the claimed limitation of claim 7, except wherein said display apparatus is adapted to be selectively connected to a plurality of types of host apparatuses, and wherein said display apparatus is adapted to be selectively connected to a plurality of types of host apparatus.

However, Rallison teaches interfacing among a plurality of types of host apparatus comprising host apparatuses (510, 503), a VCR, a videodisk player, a

receiver, and a personal computer (see figure 25A) with a plurality of types of display apparatus comprising a HUD 102, a monitor, and a television 515a (see figure 22).

As to claim 13, Rallison teaches wherein said display apparatus further comprises an indicator lamp for alarm display [Fig. 17A, col. 18, lines 18-24].

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to implement interfacing among the plurality of types of display apparatuses with the plurality of types of host apparatuses as taught by Rallison for the intended use of the display system of Michelet, because a number of variations and modifications of the invention can be also be used (see Rallison, col. 30, lines 38-40), e.g., the head mounted display can be combined with or coupled to other devices (see Rallison, col. 30, lines 55-57).

### ***Conclusion***

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN M. NGUYEN whose telephone number is 571-272-7697. The examiner can normally be reached on MON-THU from 8:00-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, a supervisor RICHARD A. HJERPE can be reached on 571-272-7691. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8000.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

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For more information about the Patent Application Information Retrieval system, see <http://portal.uspto.gov/external/portal/pair>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Kevin M. Nguyen  
Patent Examiner  
Art Unit 2629

KMN  
April 10, 2006